

TreePlantation App

Database schema

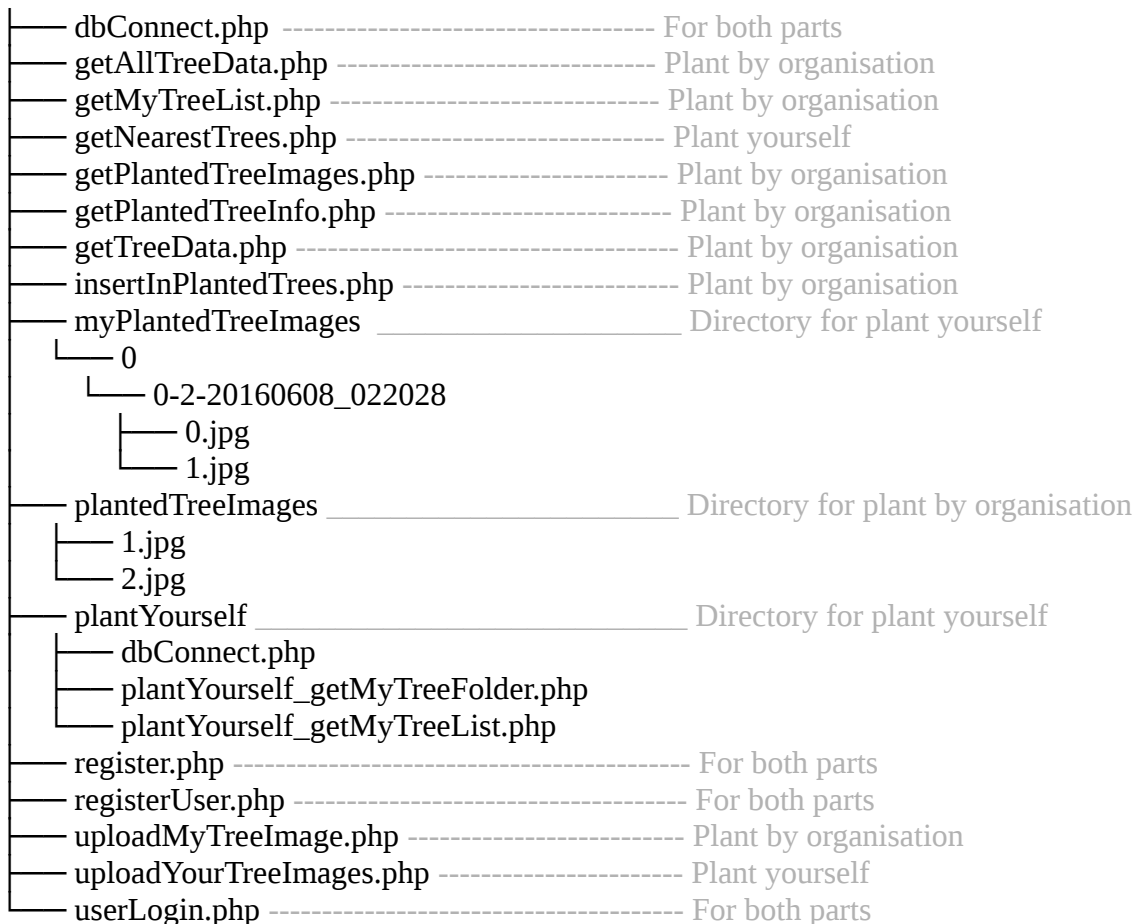
Tables -

1. Users
 - i. Users_Id
 - ii. Users_Email
 - iii. Users_Password
2. Trees
 - i. Trees_Id
 - ii. Trees_Name
 - iii. Trees_Source
 - iv. Trees_Genus
 - v. Trees_SeedSapling
 - vi. Trees_ImageUrl
3. plantedTrees
 - i. plantedTrees_Id
 - ii. plantedTrees_TreeId
 - iii. plantedTrees_UserId
 - iv. plantedTrees_Name
 - v. plantedTrees_Latitude
 - vi. plantedTrees_Longitude
4. PlantedImages
 - i. PlantedImages_Id
 - ii. PlantedImages_ptId
 - iii. PlantedImages_imageUrl
5. MyPlantedTrees
 - i. MyPlantedTrees_Id
 - ii. MyPlantedTrees_Species
 - iii. MyPlantedTrees_Comments
 - iv. MyPlantedTrees_PhotoDirectory
 - v. MyPlantedTrees_Lat
 - vi. MyPlantedTrees_Lot
 - vii. MyPlantedTrees_dirId
6. MyPlantedTreeImages
 - i. MyPlantedTreeImages_Id
 - ii. MyPlantedTreeImages_Timestamp
 - iii. MyPlantedTreeImages_TreeId
 - iv. MyPlantedTreeImages_UserId
 - v. MyPlantedTreeImages_ImageDir
 - vi. MyPlantedTreeImages_nImages

The database schema is not normalised as I had the minimal knowledge of databases prior to taking this project. There were no relationships between the attributes while I created the database except for primary key constraint and the auto-increment of the IDs. However, a new schema can be prepared with foreign key constraints and lesser number of attributes.

Backend files and directories on the server

Here is how the directory structure of the backend files look like -



Here there are three directories-

- myPlantedTreeImages/
Used to store the clicked images in the plant yourself part of the application. There are sub-directories for each plantedTree in this myPlantedTreeImages directory with the directory name as the MyPlantedTrees_Id of that tree. Each of these sub-directories further have sub-directories which are of the form <MyPlantedTrees_Id>-<Users_Id>-<Timestamp>, these subdirectories actually contain the images of the particular tree clicked by the particular user on the given timestamp.
- plantedTreeImages/
Used to store the clicked images in the plant by organisation part. These are images for various planted trees accessed by the table PlantedImages.
- plantYourself/
This directory includes php files for getting the tuples of trees planted by any user from the tables MyPlantedTrees and MyPlantedTreeImages.

Other relevant details are in the comments of the php files themselves along with comments in the android files as well.